Claims

1. Method for image refining of digital x-ray images in which a predetermined modification is performed on image data (B) by at
5   least one image processing module (A_i), dependent on at least one parameter (p_{ij}),
- whereby the or each parameter (p_{ij}) is supplied to the image processing module (A_i) from a current parameter set (P^{akt}),
- whereby a plurality of standard parameter sets is stored
10   ($P^{Nr.k}$), from which the current parameter set (P^{akt}) can be selected,
- whereby an associated model image ($V^{Nr.k}$) can be displayed for each standard parameter set ($P^{Nr.k}$) by using stored image data,
15 - whereby the selection of the standard parameter set ($P^{Nr.k}$) is effected by selecting the associated model image ($V^{Nr.k}$).

2. Method according to Claim 1, c h a r a c t e r i z e d   i n
t h a t a plurality of standard parameter sets ($P^{Nr.k}$) can be
20   selected simultaneously, and that the current parameter set
(P^{akt}) is created from the selected standard parameter sets
($P^{Nr.1}$).

3. Method according to Claim 2, c h a r a c t e r i z e d   i n
25   t h a t the current parameter set (P^{akt}) is created by
parameter-specific linear combination of the selected standard
parameter sets ($P^{Nr.k}$).

4. Method according to one of Claims 1 to 3,
30   c h a r a c t e r i z e d   i n   t h a t image data (B) for a
final image modified in accordance with the associated standard
parameter set ($P^{Nr.k}$) is stored in order to display the model
image ($V^{Nr.k}$).

35   5. Method according to one of Claims 1 to 3,
c h a r a c t e r i z e d   i n   t h a t image data (B) for a

raw image (V_o) is stored which is modified by the at least one image processing module (A_i) dependent on the associated standard parameter set ($P^{Nr.k}$) in order to display the image model ($V^{Nr.k}$).

5

6. Method according to one of Claims 1 to 5, c h a r a c t e r i z e d   i n   t h a t   different standard parameter sets ($P^{Nr.k}$) are stored for different organs to be examined, different acquisition projections and/or different
10 generator settings.

7. Image refining unit (12) for an x-ray apparatus (1), having at least one image processing module (A_i) which is designed to perform a predetermined modification of image data (B),
15 dependent on at least one parameter (p_{ij}), having a model memory (29) in which a plurality of standard parameter sets ($P^{Nr.k}$) is stored from which the current parameter set (P^{akt}) can be selected, having an image model memory (30) in which image data (B) is stored, the use of which allows an associated model
20 image ($V^{Nr.k}$) to be displayed for each standard parameter set ($P^{Nr.k}$), whereby a model image ($V^{Nr.k}$) can be selected and the selection of the associated standard parameter set ($P^{Nr.k}$) is effected through selection of the model image ($V^{Nr.k}$).

25 8. Image refining unit (12) according to Claim 7, c h a r a c t e r i z e d   i n   t h a t   the simultaneous selection of a plurality of standard parameter sets ($P^{Nr.k}$) is enabled, and that a combination module (31) is provided which is designed to create the current parameter set (P^{akt}) from the
30 selected standard parameter sets ($P^{Nr.k}$).

9. Image refining unit (12) according to Claim 8, c h a r a c t e r i z e d   i n   t h a t   the combination module (31) is designed to calculate the current parameter set (P^{akt})
35 from a parameter-specific linear combination of the selected standard parameter sets ($P^{Nr.k}$).

10. X-ray apparatus (1) having an x-ray source (2), a digital
x-ray detector (3) and a control and evaluation system (4),
whereby the control and evaluation system (4) has an image
5 refining unit (12) according to one of Claims 7 to 9.

11. X-ray apparatus (1) according to Claim 10,
c h a r a c t e r i z e d i n t h a t the x-ray detector (3)
is a solid-state detector having an active readout matrix (18)
10 made of amorphous silicon.